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| APPLICATION NO.               | F       | ILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-------------------------------|---------|------------|----------------------|---------------------|------------------|
| 10/616,599                    |         | 07/10/2003 | William P. Hnat      | 106684.000001 3471  |                  |
| 27868                         | 7590    | 03/14/2005 |                      | EXAMINER            |                  |
| JOHN F. SALAZAR               |         |            |                      | MILLER, TAKISHA S   |                  |
| MIDDLETO                      | N & REU | JTLINGER   |                      |                     |                  |
| 2500 BROWN & WILLIAMSON TOWER |         |            |                      | ART UNIT            | PAPER NUMBER     |
| LOUISVILLE, KY 40202          |         |            | 2855                 |                     |                  |

DATE MAILED: 03/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| , and the second |  |  |             |  |  |  |  |  |
|--|--|--|-------------|--|--|--|--|--|
|  | Application No.  | Applicant(s)   | <u> </u>    |  |  |  |  |  |
|  | 10/616,599   | HNAT ET AL.  | Can         |  |  |  |  |  |
| . Office Action Summary  | Examiner   | Art Unit   |             |  |  |  |  |  |
|  | Takisha Miller   | 2855   |             |  |  |  |  |  |
| The MAILING DATE of this communication appeared for Reply  | pears on the cover sheet w   | vith the correspondence addre  | ess         |  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.  after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a rep  - If NO period for reply is specified above, the maximum statutory period  - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).  | 136(a). In no event, however, may a<br>ly within the statutory minimum of thi<br>will apply and will expire SIX (6) MO<br>e, cause the application to become A | reply be timely filed  rty (30) days will be considered timely.  NTHS from the mailing date of this comm.  BANDONED (35 U.S.C. § 133). | nunication. |  |  |  |  |  |
| Status   |  |  |             |  |  |  |  |  |
| 1)⊠ Responsive to communication(s) filed on 16 £   | December 2004.   |  |             |  |  |  |  |  |
|  |  |  |             |  |  |  |  |  |
| 3) Since this application is in condition for allowa   | ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is  |  |             |  |  |  |  |  |
| . closed in accordance with the practice under   | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  |  |             |  |  |  |  |  |
| Disposition of Claims  |  |  |             |  |  |  |  |  |
| 4) ⊠ Claim(s) 1-17 is/are pending in the application 4a) Of the above claim(s) is/are withdra 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1-17 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or  | wn from consideration.   |  |             |  |  |  |  |  |
| Application Papers   |  |  |             |  |  |  |  |  |
| 9) ☐ The specification is objected to by the Examine   | er.  |  |             |  |  |  |  |  |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.   |  |  |             |  |  |  |  |  |
| Applicant may not request that any objection to the  | drawing(s) be held in abeya  | ince. See 37 CFR 1.85(a).  |             |  |  |  |  |  |
| Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the E   | •  | -, , ,   | , ,         |  |  |  |  |  |
| Priority under 35 U.S.C. § 119   |  |  |             |  |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bureat * See the attached detailed Office action for a list   | ts have been received.<br>ts have been received in a<br>prity documents have been<br>nu (PCT Rule 17.2(a)).  | Application No n received in this National St  | age         |  |  |  |  |  |
| Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date  | Paper No   | Summary (PTO-413)<br>(s)/Mail Date<br>Informal Patent Application (PTO-1)  | 52)         |  |  |  |  |  |
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#### **DETAILED Final ACTION**

## Response to Arguments

1. Applicant's arguments filed 12/16/04 have been fully considered but they are not persuasive. On page 7, paragraph 2 of the 12/16/04 response, applicant argues with respect to claims 1-17, that Brockway fails to teach or disclose the use of a sensor for measuring strain. This argument is not persuasive. It appears the applicant made a contradictory statement, as follows, "...Brockway actually discloses a semi-conductor strain gauge incorporated as a component of a pressure transducer 305 to measure pressure". The use of a strain gauge by definition, is to measure or gauge strain in an element. Therefore, since Brockway clearly uses a strain gauge as a sensor (305)(Col.9, lines 36-37) for measuring an element, applicant's argument is not persuasive.

#### Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 3. Claims 1-3,6,7,9-11,14,16 and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Brockway et al. (hereinafter Brockway).
  - a. With respect to claims 1,11,16 and 17, Brockway teaches a system (105) for measuring and remotely monitoring strain in an element comprising a sensor (305) for measuring strain in said element, producing an electrical signal representative thereof; a

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transmitting the signal representative of strain; a reader module (140) remotely located from said sensor (305) and said telemetry circuit (310) for receiving the signal representative of strain (Figs. 1-3a)(Col. 9, lines 45-49) and a control module (200) in communication with said reader module (140) for storing and processing the signal representative of strain (Col. 7, line 58 – Col. 8, line 7).

- b. With respect to claim 2, Brockway teaches a system for measuring and remotely monitoring strain in an element further comprising a housing (300) for encapsulating said sensor (305) and said telemetry circuit (310)(Fig.3a).
- c. With respect to claims 3 and 14, Brockway teaches a system for measuring and remotely monitoring strain in an element wherein said housing (300) is comprised of biocompatible material capable of implantation a living organism (Col.8, lines 15-16).
- d. With respect to claim 6, Brockway teaches a system for measuring and remotely monitoring strain in an element wherein said sensor (305) for measuring strain is a surface acoustic wave sensor (Col. 15, lines 1-4).
- e. With respect to claim 7, Brockway teaches a system for measuring and remotely monitoring strain in an element wherein said sensor (305) for measuring strain is a miniaturized strain gauge (Col. 9, lines 36-37).
- f. With respect to claims 9 and 10, Brockway teaches a system for measuring and remotely monitoring strain in an element wherein said reader module (140) further comprises a memory card for storing sensor data (Col. 7, lines 50-52).

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### Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 4,5,12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brockway et al. (6,409,674) in view of Ericson et al. (6,533,733)(hereinafter Ericson). Brockway teaches a system for measuring and remotely monitoring strain in an element comprising a sensor (305) but lacks teaching the sensor is a cantilever beam type capacitive sensor. Ericson teaches cantilever beam type sensors (Col. 6, lines 55-62). It would have been obvious to one of ordinary skill in the art to modify Brockway to include a cantilever beam type capacitive sensor as taught by Ericson in order to effectively measure strain/pressure using a variety of art equivalent sensing means which are readily available in the art (see Ericson; Col. 6, lines 55-62).
- 6. Claims 8 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brockway et al. (6,409,674) in view of Lebel et al. (hereinafter Lebel). Brockway teaches a system for measuring and remotely monitoring strain in an element comprising a housing (300) but lacks teaching the housing being substantially annular. Lebel teaches a housing (6) being substantially annular (Fig. 1a). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Brockway to include an annular housing as taught by Lebel

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in order to more favorably be implanted in various living organisms (see Lebel; Col. 20, lines 47-50).

#### Conclusion

7. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Takisha Miller whose telephone number is (571) 272-2184. The examiner can normally be reached on Monday - Friday (7:00 am - 3:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on (571) 272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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